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     FILE 'CAPLUS, WPIDS, MEDLINE, EMBASE' ENTERED AT 15:55:50 ON 15 DEC 2001
L13         11795 S (MICROCRYSTAL? OR CRYSTAL? OR NANOCRYSTAL?) (5A) SILVER
L14             2 S L13 (L) (ACNE OR PIMPLE#)

=> s l13 and (dermatolog? or skin? or topical?)
L15            17 L13 AND (DERMATOLOG? OR SKIN? OR TOPICAL?)

=> s l15 not l14
L16            15 L15 NOT L14

=> s l16 or (l13 and (priopionibacter? or acnes))
L17            15 L16 OR (L13 AND (PRIOPIONIBACTER? OR ACNES))

=>
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→ No Good

↳ some OK hits here

L14 ANSWER 1 OF 2 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 2001-556534 [62] WPIDS
CR 2001-475945 [46]; 2001-475946 [46]; 2001-514386 [46]
DNC C2001-165433
TI Use of tetrasilver tetraoxide for the treatment of dermatological skin disease e.g. eczema.
DC B06 D21
IN ANTELMAN, M S
PA (MARA-N) MARANTECH HOLDING LLC
CYC 1
PI US 6258385 B1 20010710 (200162)* 5p
ADT US 6258385 B1 CIP of US 1999-296998 19990422, US 2000-552172 20000418
PRAI US 2000-552172 20000418; US 1999-296998 19990422
AB US 6258385 B UPAB: 20011026
NOVELTY - Treatment of a dermatological skin disease involves applying a composition comprising tetrasilver tetraoxide directly to the affected skin of a patient. The composition is free of oxidizing agent.

ACTIVITY - Dermatological; antipsoriatic; antiinflammatory; antiulcer; virucide; antipruritic. A 28 year old female had a red rash caused by an unidentified dermatological tropical disease on her thigh. This condition was cured, by light dusting of tetrasilver tetroxide (Ag4O4) crystals on the areas.

MECHANISM OF ACTION - None given.

USE - For treating dermatological skin diseases e.g. eczema, psoriasis, dermatitis, ulcer, shingle, rash, bedsore, cold sore, blister, boil, herpes, **acne**, **pimple**, and/or wart (claimed), undefined tropical disease, skin chafing, cracking, itchiness, skin peeling.

ADVANTAGE - The composition reduces the time affliction of dermatological conditions or diseases, can completely cure the conditions, does not stain organic matter such as skin and is light stable. The device operates against pathogens by transferring electrons from its two monovalent silver ions to the two trivalent **silver** ions in the **crystal** contributing to the death of pathogens by traversing their cell membrane surface. This effect electrocutes the pathogens. However the normal cells are not affected, as they do not proliferate fast enough to expose these labile bonds. The composition is non-toxic.
Dwg.0/0

L14 ANSWER 2 OF 2 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 2001-481208 [52] WPIDS
DNC C2001-144192
TI Antibacterial detergent using silver/charcoal and preparation.
DC D21
IN CHOI, G B
PA (CHOI-I) CHOI G B
CYC 1
PI KR 2001008455 A 20010205 (200152)*
ADT KR 2001008455 A KR 1999-26295 19990701
PRAI KR 1999-26295 19990701
AB KR2001008455 A UPAB: 20010914
NOVELTY - An antibacterial detergent that is efficacious to remove odor, skin-related disorder, dandruff, and **pimple** by incorporating silver/charcoal/zeolite and preparation method thereof are provided.

DETAILED DESCRIPTION - The antibacterial detergent is prepared by (i) mixing 100g of silver in a dissolving container with 100 mL of nitric acid while heating the mixture; (ii) adding 200 ml of water thereto, followed by adding 100g of aluminum soda; (iii) heating the mixture up to 100deg.C for solidifying it; (iv) adding glacial acetic acid to solidified silver

for adjusting pH to about 5, followed by heating the mixture for the **crystallization** of **silver**; (v) mixing the **crystallized silver** with 1 kg of powdery charcoal and 5 kg of synthetic zeolite, followed by adding thereto 2 L of water; (vi) agitating the admixture and then heating; (vii) pulverizing the dried mixture to 500 mesh, and then adding it to 50 kg of conventional detergent.
Dwg.0/0

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=> d 1-15 bib hit

L17 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2001 ACS
AN 1996:268360 CAPLUS
DN 124:359149
TI Silver(I) Complexes of the Derivatized Crown Thioether Ligands 3,6,9,12,15,18-Hexathiacyclononadecanol and 3,6,9,13,16,19-Hexathiacycloicosanol. Determination of Stability Constants and the Crystal Structures of [Ag(19-aneS6-OH)][CF3SO3] and [Ag(20-aneS6-OH)][BF4]
AU Alberto, Roger; Nef, Walter; Smith, Alan; Kaden, Thomas A.; Neuburger, Markus; Zehnder, Margareta; Frey, Alfred; Abram, Ulrich; Schubiger, P. August
CS Division of Radiopharmacy, Paul Scherrer Insitute, Villigen, CH-5232, Germany
SO Inorg. Chem. (1996), 35(11), 3420-7
CODEN: INOCAJ; ISSN: 0020-1669
DT Journal
LA English
ST **crystal** structure **silver** hexathiacyclononadecanol hexathiacycloicosanol; silver hexathiacyclononadecanol hexathiacycloicosanol prepn structure stability; thiacyclononadecanol hexa silver prepn structure stability; thiacycloicosanol hexa silver prepn structure stability; stability silver hexathiacyclononadecanol hexathiacycloicosanol; thio crown ether hydroxy silver prepn; fluxional coordination silver hexathiacyclononadecanol hexathiacycloicosanol; safety **skin** irritant hexathiacyclononadecanol hexathiacycloicosanol prepn
IT **Crystal** structure
Fluxional rearrangement
Molecular structure
(of **silver** hexathiacyclononadecanol and hexathiacycloicosanol complexes)
IT Safety
(**skin** irritants dichlorodithiaalkanes in prepn. of hexathiacyclononadecanol and hexathiacycloicosanol)

L17 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2001 ACS
AN 1990:580088 CAPLUS
DN 113:180088
TI Surface studies of the silver sulfide ion selective electrode membrane
AU De Marco, Roland; Cattrall, Robert W.; Liesegang, John; Nyberg, Graeme L.; Hamilton, Ian C.
CS Sch. Phys. Sci., La Trobe Univ., Melbourne, 3083, Australia
SO Anal. Chem. (1990), 62(21), 2339-46
CODEN: ANCHAM; ISSN: 0003-2700
DT Journal
LA English
AB XPS and SEM have been used to examine the surface layers of the silver sulfide ion selective electrode membrane. It has been found that the outermost surface layer of the membrane is hydrated, and that aqua ions do not penetrate the membrane beyond this "**skin**" layer. The mercuric ion undergoes ion-exchange reactions with the Ag2S surface. A study of mercuric ion interference shows that reductive Hg2+ ion exchange occurs in the presence of light, whereas a metathetic displacement reaction occurs in the dark. Ferric and cupric ion interference studies show that these ions exhibit relatively weaker effects. Exposure of Ag2S to solns. of Cl-, Br-, and I- in the presence of light has been found to cause **crystals** of the corresponding **silver** halide to grow on (and out of) the membrane surface. It is postulated that the

reaction mechanism of the membrane involves photooxidn. of Ag2S to produce some metal deficient sulfide(s) (e.g. Ag2S2 and/or elemental S).

L17 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2001 ACS
AN 1981:26353 CAPLUS
DN 94:26353
TI Comparative x-ray diffraction study of the species specificity of collagens
AU Grigolava, M. V.; Kiknadze, K. A.; Rogulenkova, V. N.; Esipova, N. G.
CS Inst. Mol. Biol., Moscow, USSR
SO Biofizika (1980), 25(5), 914-18
CODEN: BIOFAI; ISSN: 0006-3029
DT Journal
LA Russian
AB X-ray diffraction showed that the helix parameters of **skin** and(or) tendon collagen from 9 species (fish, frogs, birds, and mammals) were identical within exptl. error. The collagens were almost isomorphous with fibrillar poly(Pro-Pro-Gly) and poly(Gly-Hyp-Hyp), but had slightly larger residue heights and smaller helix pitches than the synthetic analogs had. Cryst. poly(Pro-Pro-Gly) differed from the fibrillar proteins and synthetic peptides.
IT Animal
Cod
Rana ridibunda
Rana temporaria
Salamander
Scolopax rusticola
Shark
Silver carp
Skin, composition
Tendon
(collagen of, **crystal** structure and helix parameters of, collagen analogs in relation to)

L17 ANSWER 4 OF 15 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 2001-607213 [69] WPIDS
DNN N2001-453274 DNC C2001-180413
TI Multilayer composition comprises first polymeric layer and a second layer comprising bactericidal metal useful in wound dressings, pressure dressings or elbow sleeves.
DC A96 B07 D22 P34 P73
IN BECKER, R O; KANIA, B G
PA (BECK-I) BECKER R O; (KANI-I) KANIA B G
CYC 94
PI WO 2001060599 A1 20010823 (200169)* EN 27p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
ADT WO 2001060599 A1 WO 2001-US4882 20010216
PRAI US 2000-197010P 20000413; US 2000-183599P 20000218
AB WO 200160599 A UPAB: 20011126
NOVELTY - Multilayer composition (I) comprises first layer of polymeric material; and a second layer comprising bactericidal metal which engages at least one side of the first layer.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:
(1) an article of manufacture comprising (I); and

(2) a method for making a multilayer composition in sheet form comprising attaching a first layer of polymeric material to a second layer containing a bactericidal metal.

ACTIVITY - Antibacterial; antiinflammatory; **dermatological**; antiulcer.

No biological data given.

MECHANISM OF ACTION - None given.

USE - For wound dressings, pressure dressings, knee, wrist, elbow sleeves, socks, wraps, compression wraps, hot/cold packs, cushioning devices for use in orthotics and heel and sole inserts. (I) can also be used for the treatment of **skin** infections, ulcers, or surface wounds.

ADVANTAGE - (I) is durable, nontoxic, nonhazardous, nonallergenic, nonirritating and inert until activated by contact with a suitable liquid. It is a simple, versatile and cost effective material. The amount of silver released is high enough to achieve beneficial effects but does not produce side effects. (I) is flexible and conformable to the area to be treated and is resilient and shock absorbing.

Dwg.0/4

TECH UPTX: 20011126

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Composition: The first layer comprises gel composition including a block copolymer and a mineral oil. The bactericidal metal is **silver**, preferably **crystalline silver**. The second layer is a coating on the first layer, a quantity of bactericidal metal in the first layer or a silver containing material attached to the first layer and further comprises a silver containing nylon fabric.

The nylon fabric comprises fibers where at least a portion are coated with silver. The bactericidal metal further comprises silver which is mechanically attached to the second layer, which when wetted releases at least a portion of silver in the ionic form, preferably at a sustainable rate.

(I) further comprises at least one third layer made of moisture-absorbing, moisture-permeable, moisture-impermeable or gas-permeable material. At least one of the first and second layer is resilient, flexible and conformable or compressible. (I) has a elongation of at least 2 % and further comprises closure-facilitating means operably connected to (I). At least one of the first and second layer further comprises an antioxidant, emollient, humectant, **skin** conditioning agent, anti-inflammatory agent, antimicrobial agent, medicament, preservative, fragrance, coloring agent, and/or thermal regulating agent.

L17 ANSWER 5 OF 15 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 2000-452070 [39] WPIDS
DNN N2000-336598 DNC C2000-137722
TI Infrared optical element used in a sensor for analyzing fluids, especially biological fluids, or body tissue in diagnostics, or cosmetic **skin** analysis, comprises a Knoop hardness of up to 20.
DC B04 E32 J04 L03 P81 S03 V07
IN KATZIR, A
PA (KATZ-I) KATZIR A
CYC 90
PI WO 2000036458 A1 20000622 (200039)* EN 59p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000015833 A 20000703 (200046)
ADT WO 2000036458 A1 WO 1999-IL672 19991209; AU 2000015833 A AU 2000-15833 19991209
FDT AU 2000015833 A Based on WO 200036458
PRAI US 1998-111929P 19981211
TI Infrared optical element used in a sensor for analyzing fluids, especially biological fluids, or body tissue in diagnostics, or cosmetic **skin** analysis, comprises a Knoop hardness of up to 20.
AB WO 200036458 A UPAB: 20001006
NOVELTY - The infrared (IR) optical element has a Knoop hardness of up to 20 and includes up to 10 parts per million (ppm) of impurities, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) forming the novel optical element, comprising cold working an ingot of an ionic crystalline material having a Knoop hardness of up to 20 and including up to 10 ppm impurities;

(2) a sensor for attenuated total reflection spectroscopy, comprising a flat portion up to 1 mm thick of the ionic crystalline material, having a Knoop hardness of up to 20 and including up to 10 ppm impurities, or having an elongation ratio of at least 10 % at a temperature below 200 deg. C;

(3) a cell, for attenuated total reflection spectroscopy, comprising the sensor of (2);

(4) a spectrometer, for attenuated total reflection spectroscopy, comprising the sensor of (2), or the cell of (3);

(5) making a sensor for total reflection spectroscopy, comprising forming, on a surface of a substrate having an index of refraction, a layer, including only an ionic crystalline material having a Knoop hardness of up to 20, or an elongation ratio of at least 10 % at a temperature below 200 deg. C, and having an index of refraction lower than that of the substrate;

(6) an optical element, comprising an ionic crystalline material having an elongation ratio of at least 10 % at a temperature below 200 deg. C, and including up to 10 ppm impurities; and

(7) forming an optical element, comprising cold working an ingot of an ionic crystalline material having an elongation ratio of at least 10 % at a temperature below 200 deg. C, and including up to 10 ppm impurities.

USE - The infrared optical element is used in a sensor, for analyzing a fluid by contacting the sensor with the fluid and measuring its IR spectrum, and for analyzing a body tissue by contacting the sensor with the tissue, preferably subcutaneously using a hypodermic needle, catheter or endoscope, and measuring its IR spectrum (claimed). The sensor is useful in the diagnosis of tissues and biological fluids, in medicine, in cosmetics for **skin** analysis, or for measuring the diffusion of cosmetics into the **skin**. They can also be used in thermal imaging devices, IR lasers, and IR spectroscopy in industry, science, medicine clinical chemistry and pathology.

ADVANTAGE - The optical elements can be manufactured in less time, at lower cost, and with easier handling suitable for mass production. As lower temperatures are used for the cold working, more accurate dimensions can be achieved and surface finish is better, compared to more conventional materials such as other inorganic crystals and polymers. The low impurity content prevents darkening of the material.

DESCRIPTION OF DRAWING(S) - The drawing shows a schematic illustration of two cold working methods of forming an infrared optical element.

Monocrystalline ingot 64
Dies 66
Piston 68

Lower die 72
Punch 74
Piston 76
Base 78.
Dwg.5/20

TECH UPTX: 20001114

TECHNOLOGY FOCUS - CERAMICS AND GLASS - Preferred Material: The **crystalline** material is a **silver** or thallium halide containing at most 1 ppm impurities. The optical element is monocrystalline, polycrystalline, a bulk optical element, a surface optical element, a refractive optical element, a defractive optical element, or a hybrid optical element.

TECHNOLOGY FOCUS - INSTRUMENTATION AND TESTING - Preferred sensor: The flat portion is rectangular, 1-50 (preferably 10) cm long and 100-500 micro-m thick. The flat portion has a higher refractive index than the substrate on which it is formed. A refractive or diffractive mechanism couples IR radiation in and out of the flat portion.

TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Manufacture: Silver nitrate is mixed with hydrochloric, hydrobromic or hydroiodic acid, the precipitated silver halide powder is melted, and the melt cooled to form an ingot. There are at most 1 ppm metallic impurities and up to 5 ppm sulfate. If the elongation ratio is below 10 % at room temperature, the material is heated to at least 50 degrees C before cold working.

TT TT: INFRARED OPTICAL ELEMENT SENSE FLUID BIOLOGICAL FLUID BODY TISSUE DIAGNOSE COSMETIC **SKIN** ANALYSE COMPRISE HARD UP.

L17 ANSWER 6 OF 15 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 2000-376063 [32] WPIDS
DNC C2000-113599
TI New device for slowing growth of microorganisms in vivo comprising two layers one of which contains a bactericidal metal, useful as wound packing materials, dressings and deodorizing inserts.
DC A23 A96 B07 D16 D22 F07
IN BECKER, R O; KANIA, B G
PA (BECK-I) BECKER R O; (KANI-I) KANIA B G
CYC 84
PI WO 2000025726 A2 20000511 (200032)* EN 47p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW
AU 2000018119 A 20000522 (200040)
ADT WO 2000025726 A2 WO 1999-US25893 19991003; AU 2000018119 A AU 2000-18119 19991003
FDT AU 2000018119 A Based on WO 200025726
PRAI US 1998-106818P 19981103; US 1998-106778P 19981103; US 1998-106779P 19981103
AB WO 200025726 A UPAB: 20000706
NOVELTY - A device (I) for slowing microorganism growth is new and comprises:
(a) a first layer (i); and
(b) at least one second layer (ii) engaging a side of (i), at least one of (i) or (ii) comprises a quantity of bactericidal metal.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a treatment device for slowing microorganism growth in vivo comprising in sequence:

(a) an outer layer of substantially moisture impermeable, electrically non-conducting material;

(b) an intermediate layer of moisture absorbing material; and

(c) an inner layer including at least two sheets of bactericidal fabric;

(2) a system for slowing microorganism growth in vivo comprising:

(a) a sealed container; and

(b) at least one antimicrobial treatment device in the container including at least one fabric sheet comprising a quantity of bactericidal metal;

(3) a method for treating a wound comprising:

(a) providing a wound dressing comprising at least one layer comprising a quantity of bactericidal metal; and

(b) applying the dressing to a wound so that when at least one layer is contacted by wound exudate, at least a portion of the bactericidal metal is released in ionic form; and

(4) a method for slowing microorganism growth of odor causing microorganisms in vivo comprising placing a device inside an item of clothing so that the device contacts the **skin** of a user, the device comprises a bactericidal metal so that when the device is contacted by perspiration, at least some of the bactericidal metal is released in ionic form to retard growth of microorganisms.

ACTIVITY - Antibacterial; Antifungal.

MECHANISM OF ACTION - Bactericidal.

USE - The device (I) is useful as wound packing materials, as dressings for the care and treatment of surface wounds and as deodorizing inserts in socks, shoes, sole and heel pads and garment shields, **skin** infections, ulcers, surface wounds (including surgical incisions). The device also provides an effective prophylactic measure against airborne contaminants and opportunistic infections.

ADVANTAGE - No advantages stated in the specification.

DESCRIPTION OF DRAWING(S) - The diagram illustrates an exploded perspective view of a wound treatment device.

Device 10

Flexible outer layer 12

Intermediate layer 14

Adhesive 16

Sheets of silver containing fabric 18

Skin contact adhesive 20

Plurality of perforations 22.

Dwg.4/20

TECH UPTX: 20000706

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Device:The at least one layer comprises at least approximately 2 wt.% of the bactericidal metal (especially both layers contain approximately equal wt.% of the bactericidal metal). At least one of (i) and (ii) comprises a moisture absorbing material and further comprises at least one absorbent layer where one of (i) and (ii) engages a side of the absorbent layer and/or a substantially moisture-impermeable layer where one of (i) and (ii) engages a side of the moisture impermeable layer (especially gas permeable). The bactericidal fabric has a specific resistance no greater than approximately 5 (especially 1) Ohm/cm. The layer comprises an adhesive layer attached to at least a portion of an inner side of the outer layer and connecting the bactericidal fabric to a source of electrical power. The outer layer further comprises a thermoplastic material and the intermediate layer further comprises a layer of thermoplastic material attaching the outer layer to the intermediate layer.

TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Device: At least a portion of the bactericidal metal is **silver, crystalline silver** and is in a mechanically stable form. The bactericidal metal further comprises silver (especially silver containing nylon fabric) and silver mechanically attached to at least one layer so that when at least one layer is wetted, at least a portion of the silver is released in the form of ionic silver. The first (i) and second (ii) layers further comprise a fabric substrate carrying the bactericidal metal comprising a non-conducting, non-allergenic, non-adherent, mechanically stable material. At least one of (i) and (ii) comprises a moisture absorbing material and further comprises at least one absorbent layer where one of (i) and (ii) engages a side of the absorbent layer and/or a substantially moisture-impermeable layer where one of (i) and (ii) engages a side of the moisture impermeable layer (especially gas permeable). The bactericidal fabric has a specific resistance no greater than approximately 5 (especially 1) Ohm/cm. The layer comprises an adhesive layer attached to at least a portion of an inner side of the outer layer and connecting the bactericidal fabric to a source of electrical power. The outer layer further comprises a thermoplastic material and the intermediate layer further comprises a layer of thermoplastic material attaching the outer layer to the intermediate layer.

L17 ANSWER 7 OF 15 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1999-544451 [46] WPIDS
DNN N1999-403854 DNC C1999-159142
TI Cellulose triacetate film processing method for liquid **crystal** display, **silver** halide photosensitive material - involves drying processed web after separating from support to maintain specific shrinkage value which is calculated by using certain relation containing difference in width of web.
DC A11 G06 L03 U14
PA (KONS) KONICA CORP
CYC 1
PI JP 11235728 A 19990831 (199946)* 8p
ADT JP 11235728 A JP 1998-40441 19980223
PRAI JP 1998-40441 19980223
TI Cellulose triacetate film processing method for liquid **crystal** display, **silver** halide photosensitive material - involves drying processed web after separating from support to maintain specific shrinkage value which is calculated by using certain relation containing difference in width of web.
AB JP 11235728 A UPAB: 19991110
NOVELTY - The cellulose triacetate web (3) after separating from a support (1) is dried by drying rolls (6). During drying at an arbitrary position the width of web is set to A and the width at a position where the rate of residual solvent is reduced to 10% is set to B. Then the shrinkage between the positions is set to Sa =(A-B/A) multiply 100 and the drying is done to keep Sa at most 5.0.

DETAILED DESCRIPTION - During the drying conveyance, the rate of residual solvent before applying liquids with swelling property is set to Y0. The width at an arbitrary position is set to C and the width after final drying is set to D. While keeping the shrinkage percentage Sc=(C-D/C) multiply 100 the drying is set to Se at most 0.15Y + 0.57. The web after separating from a support contacts a conveyor roll. The surface length of the conveyor roll contacting a web between the positions of web with residual solvent and position where the residual solvent is reduced to 10% is set to La and the path length of the web is set to Ra. The ratio Ha = La/Ra satisfies 0.07 at most Ha at most 1.0. At the position just

before the application of an undercoating liquid by an undercoater (8), the surface length of the conveyor roll contacting the web is set to Lc and the path length to Rc. Then, the ratio Hc = Lc/Rc satisfies 0.09 at most Hc at most 0.9. The rate of residual solvent just before the final drying is set to Xo and between this position and arbitrary position it is dried so as to keep shrinkage to x1 at most 0.8 at most x0. If the boiling point of the solvent of the undercoating liquid is set to b.pt, the **skin** temperature of the web during drying is set to bpt + 40 deg. C. The web is conveyed to a tenter apparatus before the final drying while keeping the elasticities in the width direction to 1.5-400 kg/mm2. The tenter apparatus is inclined to an angle of 30-150 deg. . The tensile strength of the web during drying is maintained as 10-50 kgf/m. The surface coefficient of friction of the conveyor roll is set as H mu = mu max/ mu min at least 1.2 mu min.

USE - In LCD device, photosensitive silver halide film.

ADVANTAGE - The flat surface property of the film is maintained by controlling the shrinkage percentage, the relationship of pass length, usage of tenter etc.

DESCRIPTION OF DRAWING(S) - The figure shows the film processing apparatus. (1) Support; (3) Triacetate web; (6) Drying rolls; (8) Undercoater.

Dwg.1/5

TT TT: CELLULOSE FILM PROCESS METHOD LIQUID **CRYSTAL** DISPLAY **SILVER** HALIDE PHOTOSENSITISER MATERIAL DRY PROCESS WEB AFTER SEPARATE SUPPORT MAINTAIN SPECIFIC SHRINK VALUE CALCULATE RELATED CONTAIN DIFFER WIDTH WEB.

L17 ANSWER 8 OF 15 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1999-501944 [42] WPIDS
DNC C1999-147115
TI Manufacture of cellulose tri acetate film for **silver** halide photosensitive material, liquid **crystal** image display device - involves maintaining support body temperature lower than boiling point of the solvent of dope, while spreading dope on support body from die.
DC A11 A32 A89 G06
PA (KONS) KONICA CORP
CYC 1
PI JP 11216732 A 19990810 (199942)* 14p
ADT JP 11216732 A JP 1998-2331 19980108
PRAI JP 1997-324408 19971126
TI Manufacture of cellulose tri acetate film for **silver** halide photosensitive material, liquid **crystal** image display device - involves maintaining support body temperature lower than boiling point of the solvent of dope, while spreading dope on support body from die.
AB JP 11216732 A UPAB: 19991014
NOVELTY - A dope is spread on support body from die (2) maintaining support body (3) temperature lower than boiling point of main solvent of the dope by 0.5-55 deg. C. The support body temperature is 0.5-40 deg. C lower than boiling point of solvent when spreading the dope on support body from die (2'). The spread draw ratios are 1.0-3.0.

DETAILED DESCRIPTION - The film is produced by elution liquid flow prolonging filming method using two sets of dies (2,2') arranged in a separated position on a support body. A dope is spread on support body from die (2) maintaining support body temperature lower than boiling point of main solvent of the dope by 0.5-55 deg. C. The support body temperature is 0.5-40 deg. C lower than boiling point of solvent when spreading from die (2'). The spread draw ratios are 1.0-3.0.

USE - For **silver** halide photosensitive material, liquid **crystal** image display device.

ADVANTAGE - Defects such as generation of vertical stripes, die streaks and foamable **skin** layer are prevented. Excellent adhesion, peelability, productivity and operation efficiency are attained. High speed filming of cellulose triacetate film of excellent quality is enabled.

DESCRIPTION OF DRAWING - The figure shows schematic sectional view of elution liquid flow prolonging filming apparatus. (2,2') Dies; (3) Support body.

Dwg.4/16

TT TT: MANUFACTURE CELLULOSE TRI ACETATE FILM **SILVER** HALIDE PHOTOSENSITISER MATERIAL LIQUID **CRYSTAL** IMAGE DISPLAY DEVICE MAINTAIN SUPPORT BODY TEMPERATURE LOWER BOILING POINT SOLVENT DOPE SPREAD DOPE SUPPORT BODY DIE.

L17 ANSWER 9 OF 15 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1991-358674 [49] WPIDS
DNN N1991-274556 DNC C1991-154848
TI Silver halide photographic emulsifier prodn. - involves generating nucleus in gelatin hydrophilic protective colloid and growing emulsifier crystal for high sensitivity, etc..
DC G06 P83
PA (KONS) KONICA CORP
CYC 1
PI JP 03241337 A 19911028 (199149)* 20p
JP 2906162 B2 19990614 (199929) 27p
ADT JP 03241337 A JP 1990-39008 19900219; JP 2906162 B2 JP 1990-39008 19900219
FDT JP 2906162 B2 Previous Publ. JP 03241337
PRAI JP 1990-39008 19900219
AB JP 03241337 A UPAB: 19930928
Gelatine is used as hydrophilic protective colloid. Nucleus generator and growth are applied to produce **silver** halide photographic emulsifier comprising twin **crystal**. Nucleus generation is carried out in presence of gelatin with a thyrosin content of up to 30 mol per g under dried conditions, or nucleus generation, Ostwald thermoforming and growth are applied to produce the emulsifier. Emulsifier is of monodisperse system.

Pref. gelatin raw materials comprise; cow bone, cow or pig-leather, or fish **skin**.

USE/ADVANTAGE - Produces silver halide photographic emulsifier used in a silver halide colour photosensitive material. Obtd. photosensitive material has high sensitivity, improved graininess, and good preservation. @(20pp Dwg.No.0/1)@

L17 ANSWER 10 OF 15 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1989-204073 [28] WPIDS
DNC C1989-090797
TI Sunscreen cosmetic material - comprises various types of mica contg. metals in the crystal lattice.
DC D21
PA (SHIS) SHISEIDO CO LTD
CYC 1
PI JP 01143822 A 19890606 (198928)* 5p
ADT JP 01143822 A JP 1987-302795 19871130
PRAI JP 1987-302795 19871130
AB JP 01143822 A UPAB: 19930923
Cosmetic contains one or more selected from synthetic mica powder contg. one or more of natural gold mica powder, black mica powder and iron, zinc, titanium, manganese, chromium, cobalt, nickel, selenium and **silver** in the **crystal** lattice.

USE - The material offers excellent sun screening effect. It is smoothly and uniformly applied to the **skin** without irritation. 0/0

L17 ANSWER 11 OF 15 MEDLINE
AN 1999362360 MEDLINE
DN 99362360 PubMed ID: 10433674
TI Efficacy of **topical** silver against fungal burn wound pathogens.
AU Wright J B; Lam K; Hansen D; Burrell R E
CS Westaim Biomedical Corp, Fort Saskatchewan, Alberta, Canada.
SO AMERICAN JOURNAL OF INFECTION CONTROL, (1999 Aug) 27 (4) 344-50.
Journal code: 4T6; 8004854. ISSN: 0196-6553.
CY United States
DT (CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199908
ED Entered STN: 19990913
Last Updated on STN: 19990913
Entered Medline: 19990831
TI Efficacy of **topical** silver against fungal burn wound pathogens.
AB BACKGROUND: Fungal infections of burn wounds have become an important cause of burn-associated morbidity and mortality. The nature of fungal infections dictates aggressive treatment to minimize the morbidity associated with these infections. Persons with large total body surface area burns are particularly susceptible to fungal infections and are treated in such a manner as to minimize their risk of infection. METHODS: This study examined the in vitro fungicidal efficacy of a variety of different **topical** agents. By placing fungal inocula in contact with mafenide acetate, **silver** nitrate, **silver** sulfadiazine, and a **nanocrystalline silver**-coated dressing, we determined the kill kinetics of these **topical** agents against a spectrum of common burn wound fungal pathogens. RESULTS: The **topical** antimicrobials that were tested demonstrated varying degrees of efficacy against these pathogens. CONCLUSION: The **nanocrystalline silver**-based dressing provided the fastest and broadest-spectrum fungicidal activity and may make it a good candidate for use to minimize the potential of fungal infection, thereby reducing complications that delay wound healing.

L17 ANSWER 12 OF 15 MEDLINE
AN 92195713 MEDLINE
DN 92195713 PubMed ID: 1549384
TI Allergic fungal sinusitis.
AU Corey J P
CS University of Chicago, Pritzker School of Medicine, Illinois.
SO OTOLARYNGOLOGIC CLINICS OF NORTH AMERICA, (1992 Feb) 25 (1) 225-30. Ref: 32
Journal code: ON4; 0144042. ISSN: 0030-6665.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 199204
ED Entered STN: 19920509

Last Updated on STN: 19920509
Entered Medline: 19920422

AB In summary, AFS is a newly recognized form of sinusitis, appearing in otherwise healthy young adults with a history of chronic bacterial or polypoid rhinosinusitis refractory to conventional therapy. Radiologic study may show patchy opacification or calcifications of the sinuses on CT. The patients have an elevated total IgE, peripheral eosinophilia, and positive **skin** tests for fungal antigens. They may also have elevated serum fungal allergen-specific IgE and IgG and precipitating antibodies to Aspergillus, Curvularia, or other fungi. Diagnostic and therapeutic surgical drainage of the sinuses will establish a definitive diagnosis by identifying the typical allergic mucin with eosinophils, Charcot-Leyden **crystals**, few fungal hyphae on **silver** stain, and a lack of tissue invasion. Treatment, other than surgical drainage, consists of systemic corticosteroids to prevent recurrence of disease.

L17 ANSWER 13 OF 15 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
AN 1999286318 EMBASE
TI Efficacy of **topical** silver against fungal burn wound pathogens.
AU Wright J.B.; Lam K.; Hansen D.; Burrell R.E.
CS Dr. J.B. Wright, Westaim Biomedical Corp, 10102-114 St, Fort Saskatchewan, Alta. T8L 3W4, Canada
SO American Journal of Infection Control, (1999) 27/4 (344-350).
Refs: 25
ISSN: 0196-6553 CODEN: AJICDC
CY United States
DT Journal; Article
FS 004 Microbiology
009 Surgery
013 Dermatology and Venereology
027 Biophysics, Bioengineering and Medical Instrumentation
037 Drug Literature Index
LA English
SL English
TI Efficacy of **topical** silver against fungal burn wound pathogens.
AB Background: Fungal infections of burn wounds have become an important cause of burn-associated morbidity and mortality. The nature of fungal infections dictates aggressive treatment to minimize the morbidity associated with these infections. Persons with large total body surface area burns are particularly susceptible to fungal infections and are treated in such a manner as to minimize their risk of infection. Methods: This study examined the in vitro fungicidal efficacy of a variety of different **topical** agents. By placing fungal inocula in contact with mafenide acetate, **silver** nitrate, **silver** sulfadiazine, and a **nanocrystalline silver**-coated dressing, we determined the kill kinetics of these **topical** agents against a spectrum of common burn wound fungal pathogens. Results: The **topical** antimicrobials that were tested demonstrated varying degrees of efficacy against these pathogens. Conclusion: The **nanocrystalline silver**-based dressing provided the fastest and broadest-spectrum fungicidal activity and may make it a good candidate for use to minimize the potential of fungal infection, thereby reducing complications that delay wound healing.
CT Medical Descriptors:
*burn: ET, etiology
*wound infection: ET, etiology
*mycosis: ET, etiology
drug efficacy

in vitro study
fungicidal activity
wound dressing
candida
aspergillus fumigatus
saccharomyces cerevisiae
mucor
nonhuman
controlled study
topical drug administration
article
Drug Descriptors:
*silver: AD, drug administration
*silver: PD, pharmacology
mafenide acetate: AD, drug administration
mafenide acetate: PD, pharmacology
silver nitrate: AD, drug administration
silver nitrate: PD, pharmacology
sulfadiazine: AD, drug administration
sulfadiazine: PD, pharmacology
sulfadiazine silver

L17 ANSWER 14 OF 15 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
AN 92104030 EMBASE
DN 1992104030
TI Allergic fungal sinusitis.
AU Corey J.P.
CS Pritzker School of Medicine, University of Chicago, Box 412, 5841 S. Maryland Avenue,Chicago, IL 60637, United States
SO Otolaryngologic Clinics of North America, (1992) 25/1 (225-230). ISSN: 0030-6665 CODEN: OCNABW
CY United States
DT Journal; General Review
FS 004 Microbiology
011 Otorhinolaryngology
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LA English
SL English
AB In summary, AFS is a newly recognized form of sinusitis, appearing in otherwise healthy young adults with a history of chronic bacterial or polypoid rhinosinusitis refractory to conventional therapy. Radiologic study may show patchy opacification or calcifications of the sinuses on CT. The patients have an elevated total IgE, peripheral eosinophilia, and positive **skin** tests for fungal antigens. They may also have elevated serum fungal allergen-specific IgE and IgG and precipitating antibodies to Aspergillus, Curvularia, or other fungi. Diagnostic and therapeutic surgical drainage of the sinuses will establish a definitive diagnosis by identifying the typical allergic mucin with eosinophils, Charcot-Leyden **crystals**, few fungal hyphae on **silver** stain, and a lack of tissue invasion. Treatment, other than surgical drainage, consists of systemic corticosteroids to prevent recurrence of disease.

L17 ANSWER 15 OF 15 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
AN 78210029 EMBASE
DN 1978210029
TI Early treatment of burns by open silver nitrate spray.
AU Lockhart Jr. W.E.

CS 401 North 4th St., Alpine, Tex. 79830, United States
SO Rhode Island Medical Journal, (1977) 60/9 (423-426+458).
CODEN: RIMJAQ
CY United States
DT Journal
FS 037 Drug Literature Index
009 Surgery
034 Plastic Surgery
013 Dermatology and Venereology
LA English
AB A method of treating severe burns as early as possible with intravenous meperidine analgesia, debriding the wound with iodophor scrub detergent-antiseptic, rinsing with sterile, distilled water, and spraying with a fresh solution of one per cent silver nitrate repeated every hour was developed on the Mexican Border remote from burn centers. The method has the advantage of sealing the wound and stopping the loss of fluids, electrolytes, and protein, thus to prevent shock in the early hours (perhaps during transportation to a burn center), to ease pain, to precipitate damaged protein in the wound and prevent absorption, to destroy bacteria in the wound, and to seal the wound and provide a protective cover beneath with **skin** can regenerate in second degree burns and third degree areas are prepared for grafting. The method can be applied in remote areas (more than one hundred miles from a burn center) particularly in poor countries that lack transportation and burn centers, and even in the absence of a doctor, by a skilled layman. The method is simple, painless, free of danger, and economical and requires as a minimum distilled water, **silver** nitrate **crystals**, and a spraying device, such as a Windex glass spray bottle. The method is adaptable to disaster situations where large numbers of burned patients present to be cared for by limited medical personnel, as in the Texas City Disaster. The method would be valuable in nuclear warfare when large numbers of people would be burned, where transportation and medical facilities would be overloaded or disrupted.
CT Medical Descriptors:
*burn
*clinical study
*therapy
injury
major clinical study
topical drug administration
oral drug administration
prevention
Drug Descriptors:
*chloramphenicol
*mafenide
*oxacillin
*silver nitrate
*sulfadiazine silver